

FRAMEWORK FOR AN AUCTION BASED MARKET VALUE

RATIONALE FOR AN AUCTION BASED MARKET VALUE

An auction-based market value is preferable to an index-based market value as a replacement for the Neutral Fact-Finder. It is likely to produce better results on several important dimensions. The type of auction in question is an offering of a specified "load following" type product for use within the local utility service territory for which the market value is being set.

Direct Rather than Indirect

An auction of a local utility energy product does not require interpretation or interpolation. It will be the price that real players are willing to pay for real deals to serve retail load within the utility territory. While an index may or may not be based entirely on "real" deals, there is reason to believe that the index sample may be incomplete since indexes rely on voluntary reporting of prices that may also include offers rather than completed deals.

Translation Tariff Mechanics Will Be Simplified

Since the auction product is designed to underpin retail service within the utility territory, far less will need to be done either with (1) the development of a basis differential for an index or (2) the reflection of peaking and load following on top of a block product upon which an index would be based. CTCs would be calculated by taking into account the load swings of each class in each month's peak and off-peak periods (See attached).

Create a Basis for a Default Product that Includes Load Following

Subsequent to the auction, the utility would make some amount of the auction product available to RES, ARES and customer self-managers (CSM) in order to assure (1) some market liquidity in load following and peak supply, especially in the summer, and (2) that the utility that has filed the tariff to replace the NFF will stand behind the results of the tariff.

Can Be Implemented Quickly

An index, due to the need to come to more complex agreements associated with the translation tariff, may well take longer to get together to implement than an auction. The auction can be based on a load following product that can be designed within a short period and can be carried out in roughly the same several week time period as any supply RFP.

THE PRODUCT: A "LOAD FOLLOWING" SERVICE

An index has a key problem in calculating a market value that accurately reflects the value of generation within the utility territory in which retail customers would be served. The index approach will tend to be based on block power sales instead of "load following" unit sales. This means that significant guesswork is required to adjust the values produced from a weighted average of those block sales.

The auction can rely, instead, on a product specifically designed to reflect the product that must be bought or assembled in the market in order to serve retail customers within a utility territory. NewEnergy's experience suggests that the single product most reflective of a wholesale match with the retail level is one that has the following features:

- The service allows the purchaser to schedule by hour for the next day.
- The hourly schedule for the following day would be within a specific minimum and maximum take collar for each month's peak and off-peak periods, thus creating the load shape of the service taken. The collar reflects the swing needed for weather off of the base load shape.
- The product/service would be offered in specific megawatt increments (such as 5Mw for RES and ARES and 1 Mw for CSMs).
- The minimum and maximum takes in the peak and off-peak period for a month would be based on the non-residential load shape of the utility, plus or minus the swing needed for weather.
- The service/product would apply in each month for a year ahead or for the season immediately following the auction (a March or April auction for the summer or for the full year ahead June-May and a July or August auction for the non-summer).
- Each megawatt taken/delivered under the hourly day ahead schedule would be paid for on a volumetric basis if the bid were based on that or there would be capacity payment made and then an energy price paid.

THE PRICING OF THE BIDS: SEE THE ATTACHED EXAMPLE

Bidders would turn in two prices for each month, a peak and off-peak price. An example of the pricing for the product/service based on a July 1999 load shape for ten customer classes is provided in the attachment to this paper.

THE AMOUNT OF THE PRODUCT

NewEnergy suggests that any utility choosing the auction approach be prepared to offer for auction service sufficient for the retail needs of 10% of the total non-residential load in the territory available for market service as measured against peak load by month or by season. This would be translated into a benchmark megawatt figure to which the monthly peak and off-peak minimum and maximum takes would be applied in the auction for each month. For example, if the benchmark megawatt figure were 500 Mw then a percentage swing in the peak period either way might be applied for a specific month. (See attached example as an illustration of the magnitude of the swing percentages required and how they would differ by month).

TWO AUCTION METHODS

NewEnergy has not settled on a preferred auction method at this time, but offers two options for consideration. Both methods are relatively unsusceptible to gaming or rigging by any party or group of parties from either side of the auction.

1) SEALED VICKREY SECOND PRICE

For purposes of this auction discussion, NewEnergy suggests that a Sealed Vickrey Second Price approach be used. Under this approach, each bidder would submit, by the designated time, a sealed bid for the amount of the monthly service product that the bidder desires. Bids could be required to meet some minimum amount and price (with the amount for CSMs set at a lower minimum take increment than that for RES/ARES). When all bids are opened, the second highest bid will be the market value for the product (according to Vickrey theory that the second highest price will better approximate the consensus price).

The winning bidder and the bidder with the price above the winning bidder must buy the product in the amount bid at the winning price. All other

bidders are losers but then will have the opportunity during the purchasing window to buy a default product at the set market value.

2) SEALED DUTCH DESCENDING PRICE

For purposes of this auction discussion, NewEnergy suggests that a Sealed Dutch Descending Price approach be used. The difference between this approach and the Vickrey approach set out above is that amounts of the service/product would be sold until all of the offered product was sold or until bids ended, leaving some of the product unsold. The last (lowest) price at which the offered service were sold would be the "market-clearing" price that would establish the market value. All winning bidders would then be required to purchase the product at that market-clearing price.

DEFAULT SERVICE AVAILABLE DURING A BUYING WINDOW

In order to assure that there would be a modicum of liquidity in the market, subsequent to the auction and after the market value had been set, CSMs, RES and ARES could purchase a default service at the market value price established by the auction. The default sales would be first-come first-served based on a pre-determined maximum amount of default service. The amount of default service could be set at a level equal to the originally offered amount of auction service (10% of total non-residential load). A key question will be the timing of such purchase decisions with respect to the date of the auction. Care should be taken to assure that the local utility would not be the sole provider of wholesale service. A separate memo is being prepared by NewEnergy with respect to the conditions under which the default service would be offered.

RESTRICTIONS

In order to avoid problems at FERC, any restrictions on the re-sale of the auctioned product would be placed on the RES/ARES/CSM by the ICC as a condition of participation. Presumably, RES, ARES and CSMs could trade or sell the auction and default service so as to account for customers who

switch providers. Perhaps a limitation on resale for non-retail purposes could be imposed as a condition of ARES certification.

RELATED ISSUES AND CONDITIONS

Many participants in the market have come to appreciate the extent to which the PPO tends to impose a distorted structure on the market. Even if the replacement for the NFF were to produce a more accurate Market Value, the market would still tend to re-monopolize as long as the PPO existed. The PPO could be eliminated with no harm and much benefit to customers if Market Value were set by an auction accompanied by some availability of a default product for RES, ARES and CSMs.

The auction could be phased in on a schedule and with transition rules that minimized customer dislocation and confusion, protected utility CTC recovery and maintained an opportunity for new competitors to operate.

One possible schedule to consider would be the holding of an auction in mid-July for a product that would commence January 2001. The auction would be held prior to the determination of the NFF Market Value. Whether or not the NFF Market Values are released by the ICC or held in confidence, the auction based Market Value would take effect January 1, 2001 only if the General Assembly, in the post-election veto session, had provided for an exemption from sale of the PPO by utilities that subscribed to the auction.

There would also be transition issues such as whether for customers currently on the PPO would see the price change on January 1.

ATTACHED EXAMPLE: FOR ILUSTRATIVE PRUPOSES ONLY

Attached is an illustration (in Microsoft Excel), based on ComEd's generic July load shapes for all ten general service rate classes as well as for the aggregate of these classes. The illustration shows the swings that occur in each rate class and in the aggregate due to weather and other variables. The most important items in the illustration are the shaded sections that show the

percentage relationship of the maximum or minimum demand in any given period for a class or the aggregate to the average. The average number could serve as the benchmark of the amount of the auction product/service offered for that month and the maximum and minimum demand could serve as the ceiling and floor of the collar. There are also assumed auction prices that are based on certain recent block prices from public sources. ***THESE PRICES ARE FOR ILLUSTRATION PURPOSES ONLY.***